

REMARKS

By this amendment, Applicants have amended Figure 1 of the drawings as suggested by the Examiner, and have changed the title of the invention to be more description of the invention.

On the merits, the examiner has rejected claims 1-6 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,969,959 (Odegard et al.). According to the Examiner, Odegard et al. discloses a converter circuit arrangement with a protection circuit, apparently as shown in Figure 1 of the reference. Applicants respectfully traverse the Examiner's grounds for rejection.

Applicants note that the European counterpart of the cited Odegard et al. reference, i.e. EP 0 899 861 was identified in the International Search Report as an "A" reference relating generally to the background art. A copy of this document is attached hereto. Further, Applicants cannot determine from the Examiner's argument in support of the rejection, why he believes Odegard et al. anticipates the invention of claims 1-6.

It is Applicants' understanding that the Odegard et al. reference relates to a rectifier apparatus having a 12-pulse diode rectifier, a voltage intermediate, and an alternating current converter connected thereto. The 12-pulse diode rectifier is subdivided into two branch rectifiers, each connected on the alternating current side to a secondary winding of a three-winding transformer. On the direct current side, each of these two branch rectifiers of the 12-pulse diode rectifier is connected to a condenser of the voltage intermediate. Between the two branch rectifiers of the 12-pulse diode rectifier is a circuit comprising varistors. It is by means of this circuit that the rectifier apparatus is to be protected against failures and overvoltages.

This 12-pulse diode rectifier, as in the case of the rectifier apparatus according to the prior art Fig. 1 of the pending U.S. application is a diode "front end" type. In most cases this

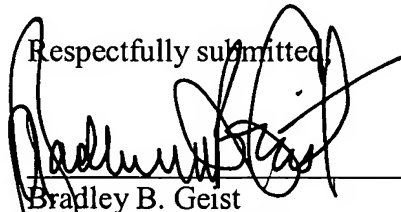
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type of diode meets the requirements regarding network power factor and harmonics content. If more exacting requirements regarding network reactions are imposed, the 12-pulse diode rectifier must be replaced by a 24-pulse diode rectifier. This doubles the outlay for the network-side rectifier of the apparatus, which affects the space requirements.

In contrast to Odegard et al., the present invention is a voltage intermediate circuit converter which provides all of the advantages of the known embodiments ("diode front end" and "active front end") of a network-side rectifier, but without the known disadvantages; yet keeping the outlay to a minimum. The foregoing is accomplished by the use of a "self-commutated pulse-controlled converter" for each of the converter elements. Applicants do not understand Odegard et al. to disclose or suggest this claimed element.

Accordingly, Applicants respectfully request that the Examiner withdraw the grounds for rejection, and favorably reconsider the allowability of the pending claims.

Respectfully submitted,



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Enclosure



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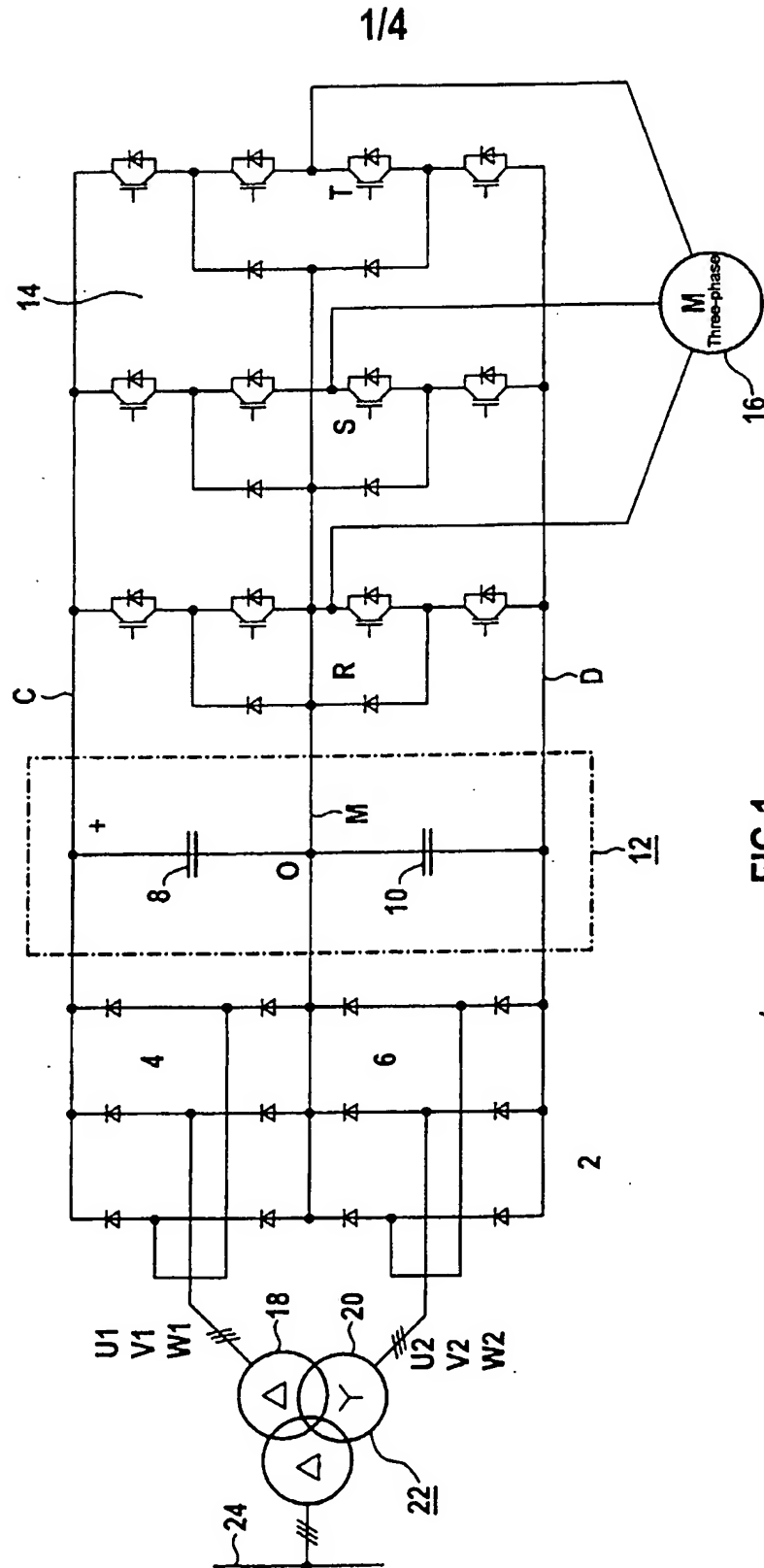


FIG 1
(PRIOR ART)